



The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
William A. Hinton State Laboratory Institute  
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK  
GOVERNOR

TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD  
SECRETARY

JOHN AUERBACH  
COMMISSIONER

07/13/2011

Omar Gonzalez-Pagan  
Assistant District Attorney, Suffolk County

Dear ADA Gonzalez-Pagan,

Enclosed is the information you requested in regards to Commonwealth vs. [REDACTED] Included are copies of the following:

1. Curriculum Vitae for Annie Dookhan and Daniela Frasca.
2. Drug Analysis Laboratory Receipt.
3. Control Cards with analytical results for samples # [REDACTED]
4. Analysis sheets with custodial chemist's hand notations and test results.
5. GC/Mass Spectral analytical data for samples # [REDACTED]

Daniela Frasca was the custodial chemist and performed the preliminary testing and net weight for this sample. Annie Dookhan was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

A handwritten signature in black ink, appearing to read "Annie Dookhan".

Annie Dookhan  
Chemist II  
Drug Analysis Lab  
Jamaica Plain, MA. 02130  
(617) 983-6631

## Curriculum Vitae

**Annie Khan (Dookhan)**

### **Education:**

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

### **Experience:**

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

\*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

\*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.

\*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.

\*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

\*Maintenance and repairs of all analytical instruments.

\*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.

\*Responsible for the Quality Control/Quality Assurance program for the drug lab.

\*Notary Public.

\*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

\*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.

\*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.

\*Writing, revising and reviewing Standard Operating Procedures (SOPs).

\*Trained and supervised new chemists and interns for the department.

\*Routine QC testing of products for the FDA.

\*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

\*Calibration, preventive maintenance, QC and QA of analytical instrumentation.

\*Complete testing of chemicals for Vendor Validation Project for the FDA.

\*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

### **Additional Training:**

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

### **Association:**

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

## Curriculum Vitae

Daniela Frasca

### Education

**Boston University School of Medicine, Boston MA**  
*Currently enrolled in the Biomedical Forensic Science MS Program*

**Suffolk University, Boston, MA**  
*Graduated in 05/1996 and received a Bachelor of Science in Biochemistry*

### EXPERIENCE

**Massachusetts State Laboratory Institute/DPH, Jamaica Plain, MA** 01/2001 – present  
Drug Laboratory: Chemist II

- Analysis of all substances by chemical screening, microscopy, and instrument confirmation to determine the presence of drugs for law enforcement agencies in the Commonwealth of Massachusetts.
- Appointed assistant analyst on January 29, 2001 by the Assistant Commissioner of DPH
- Completed four weeks of training in drug analysis under the supervision of senior chemists.

**Quest Diagnostics Incorporated, Cambridge, MA** 09/1996 – 10/2001  
Department of Toxicology: Medical Technologist I

- Handles comprehensive toxic analysis, therapeutic drug monitoring, forensic drug screening, and compound ID's of biohazard samples utilizing standard operating procedures in clinical toxicology.
- Entered data and interpreted results for reporting
- QC/QA of multiple analytical instrumentation as well as maintenance
- Completed 60 days of training under the supervision of doctorate level toxicologists.

### Additional Training

**Northeastern Association of Forensic Scientists**  
Designer Drugs                      Clandestine labs  
Agilent Instruments and Software      Digital Photography

**McCrone Research Institute**  
Forensic Polarized Microscopy  
Polarized Microscopy of Illicit Drugs and Excipients

**Massachusetts State Laboratory Institute**  
Expert Witness  
Raman Spectroscopy

### Associations and Programs

- Northeastern Association of Forensic Scientists (NEAFS) 2001 - present
- The International Association of Forensic Toxicologists (TIAFT) 2003 - present
- The International Association of Therapeutic Drug Monitoring And Clinical Toxicology (IATDMCT) 2003 - present
- Massachusetts State Science Fair Judge 2000 - present
- Middle School State Science Fair Judge 2006 - present
- Volunteer Science Project Mentor/Tutor for the TTT Mentor Program 2003 - present

**DRUG RECEIPT**CC # [REDACTED]  
BOOK # 64  
PAGE # 150  
DESTRUCTION # \_\_\_\_\_District/Unit A-1 DCU  
Name & Rank of Arresting Officer S/D WA DWAN ID# 10066

DEFENDANT'S NAME

ADDRESS

CITY

STATE

ROX

MA

BOSTON

MA

BOSTON

MA

## LAB USE ONLY

DESCRIPTION OF ITEMS SUBMITTED

GROSS  
QUANTITYGROSS  
WEIGHTANALYSIS  
NUMBER

CRACK COCAINE

1 P/B

3.99g

To be completed by ECU personnel only

Name and Rank of Submitting Officer [Signature] ID# 9370Received by [Signature] Date 5-11-11

ECU Control # \_\_\_\_\_

No. [REDACTED] Date Analyzed: 06-30-11  
City: Boston D.C.U. Police  
Officer: P.O. Diana Lopez

Def: [REDACTED]  
Amount: Subst. SUB  
No. Cont. 1 Cont. pb

Date Rec'd: 05/11/2011 No. Analyzed:

Gross Wt: 3.990 Net Wt: 0.13g  
#Tests: 7

Result: (B) Findings: cocaine  
cocaine

**DRUG POWDER ANALYSIS FORM**

SAMPLE #



AGENCY

Boston

ANALYST

DR

PHYSICAL DESCRIPTION:

Ev. W. OK

Substance in 1 PB

Marg -

Gross wt. 0.1677g  
(double bagged)

Fraed -

Net wt. 0.1350g

Meck -

Cobalt - + w/acid

Gold +

TLTA - + w/acid

PRELIMINARY TEST RESULTS

RESULTS

Cocaine

DATE

6/27/11

GC/MS CONFIRMATORY TEST

RESULTS

Cocaine

MS

OPERATOR

DR

DATE

6/30/11

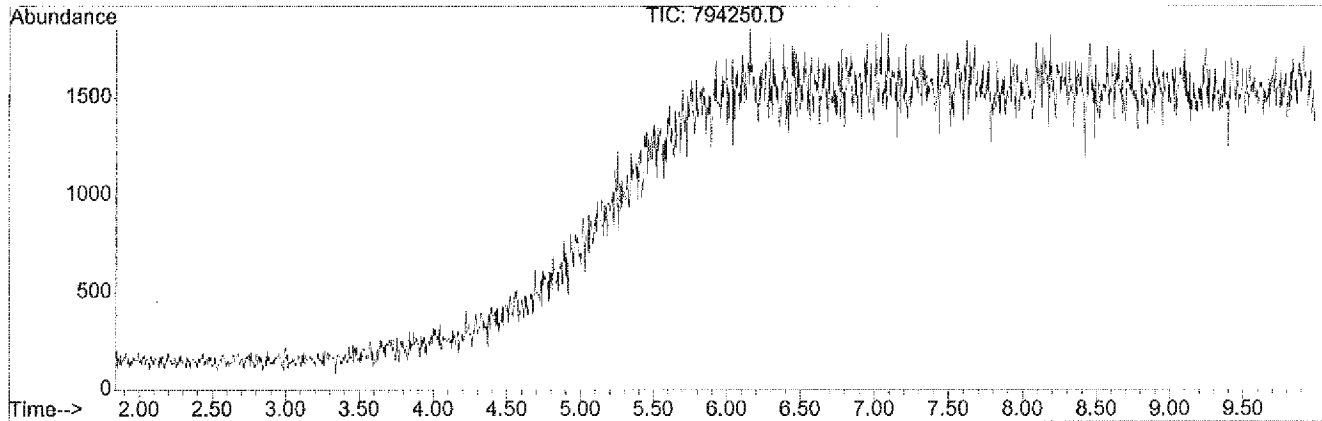
Area Percent / Library Search Report

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Information from Data File:

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Operator : ASD  
Date Acquired : 29 Jun 2011 17:45  
Sample Name : BLANK  
Submitted by : DXF  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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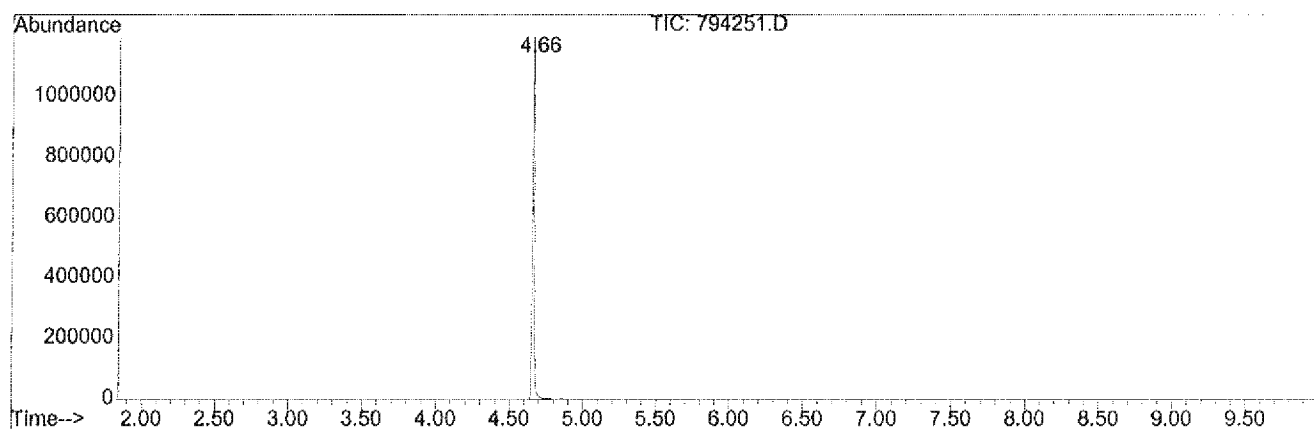
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\*\*\*NO INTEGRATED PEAKS\*\*\*

# Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\06\_29\_11\794251.D  
 Operator : ASD  
 Date Acquired : 29 Jun 2011 17:57  
 Sample Name : COCAINE STD  
 Submitted by : DXF  
 Vial Number : 16  
 AcquisitionMeth: DRUGS  
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.659	1078474	100.00	100.00



# Area Percent / Library Search Report

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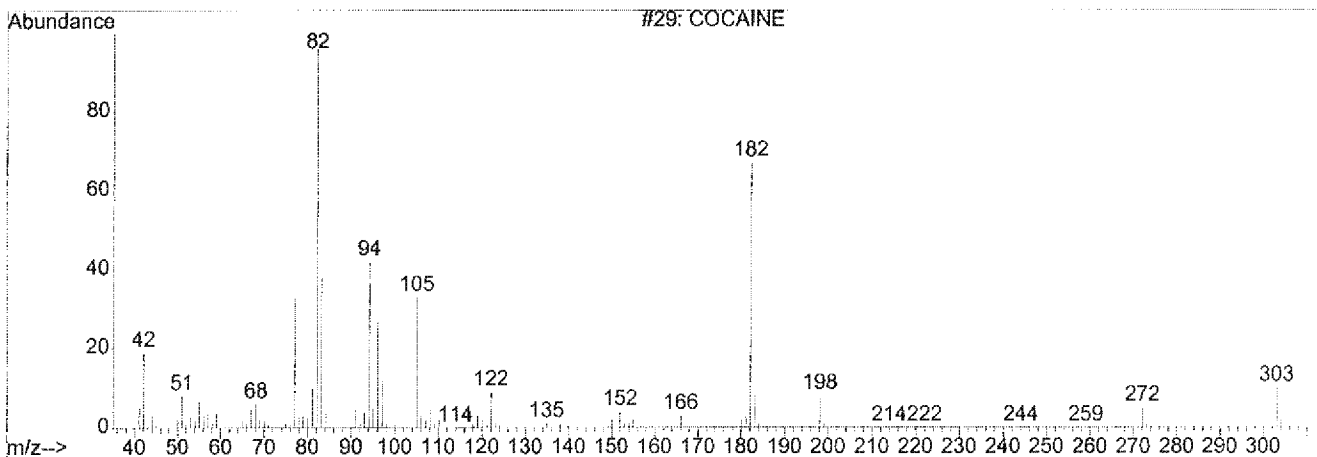
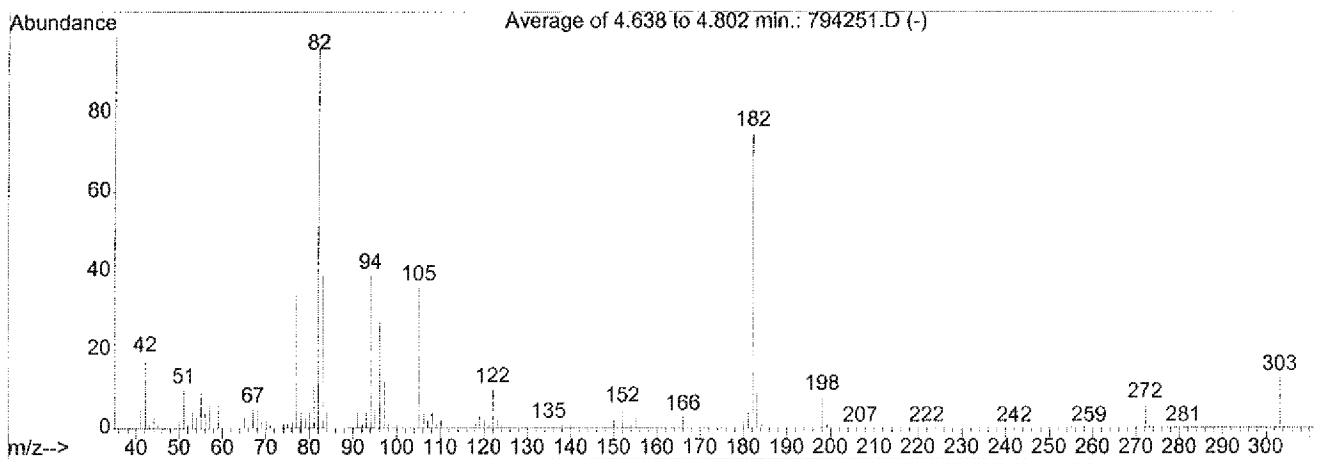
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Operator        : ASD
Date Acquired   : 29 Jun 2011  17:57
Sample Name     : COCAINE STD
Submitted by    : DXF
Vial Number     : 16
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries:  C:\DATABASE\SLI.L           Minimum Quality: 90
                   C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                   C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
1	4.66	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



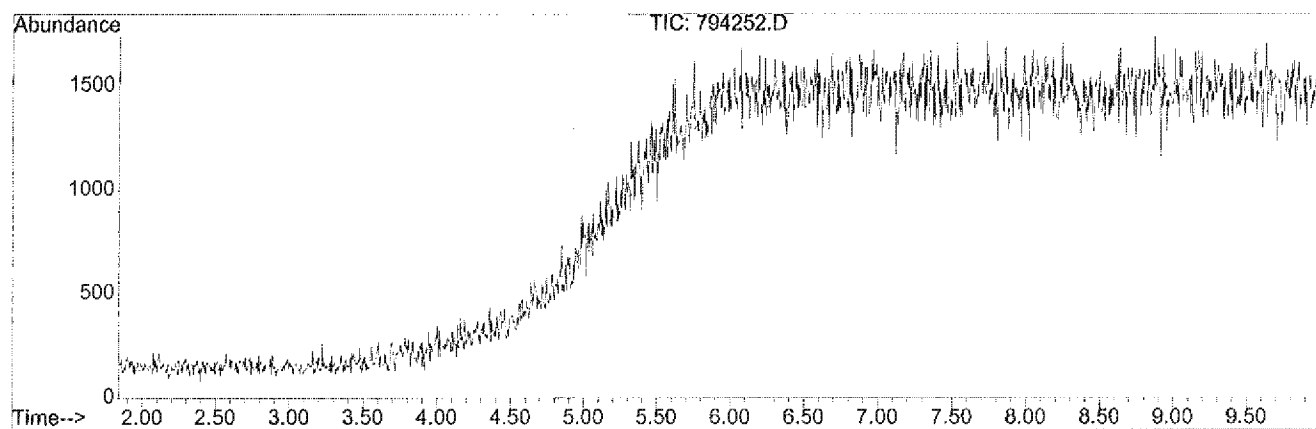
# Area Percent / Library Search Report

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Operator : ASD  
Date Acquired : 29 Jun 2011 18:10  
Sample Name : BLANK  
Submitted by : DXF  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

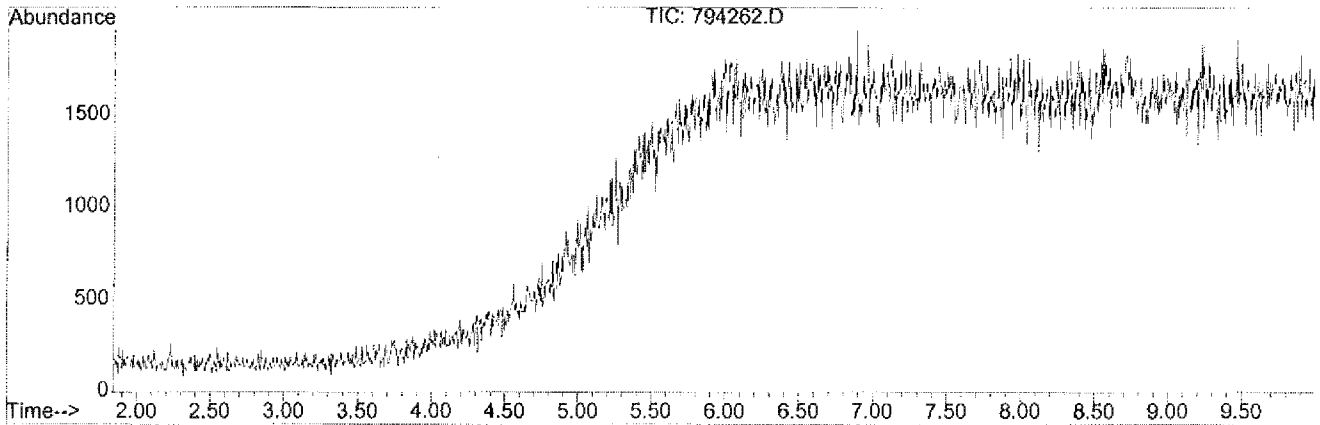
# Area Percent / Library Search Report

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Operator : ASD  
Date Acquired : 29 Jun 2011 20:16  
Sample Name : BLANK  
Submitted by : DXF  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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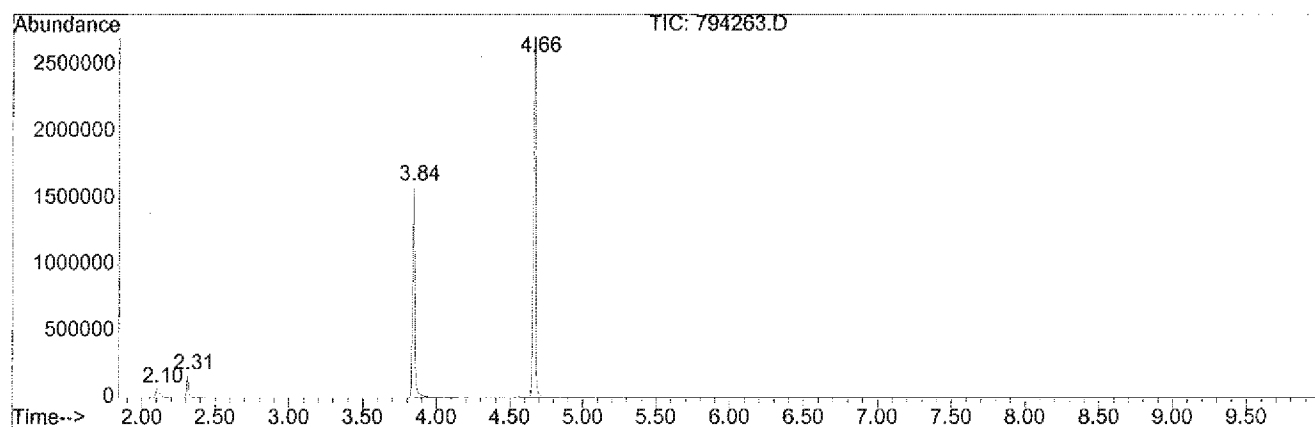
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\*\*\*NO INTEGRATED PEAKS\*\*\*

# Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\06\_29\_11\794263.D  
 Operator : ASD  
 Date Acquired : 29 Jun 2011 20:29  
 Sample Name : XXXXXXXXXX  
 Submitted by : DXF  
 Vial Number : 63  
 AcquisitionMeth: DRUGS  
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
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2.313	163057	3.04	4.90
3.844	1728433	32.26	51.97
4.665	3325848	62.08	100.00

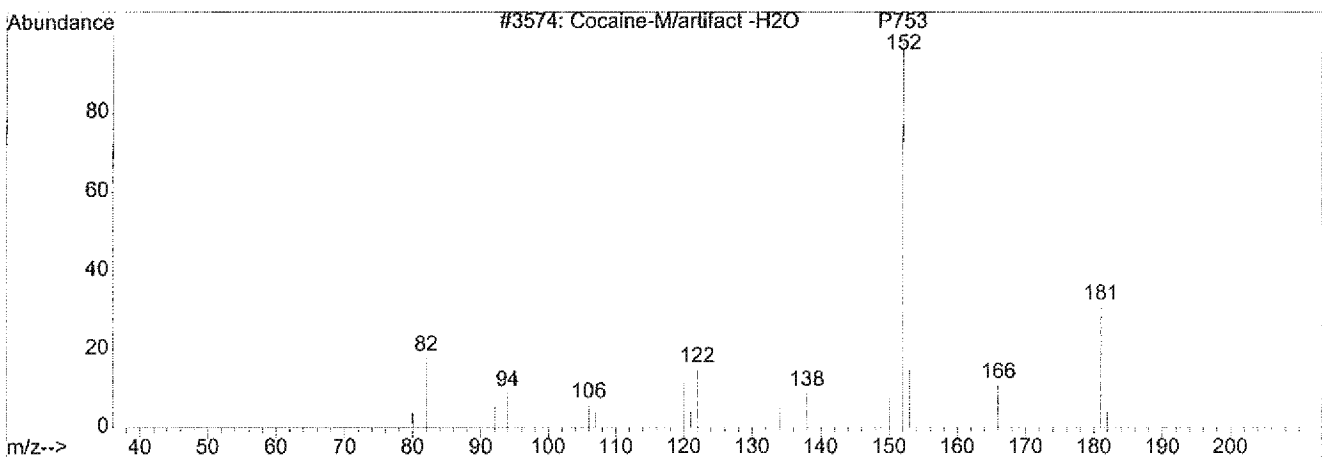
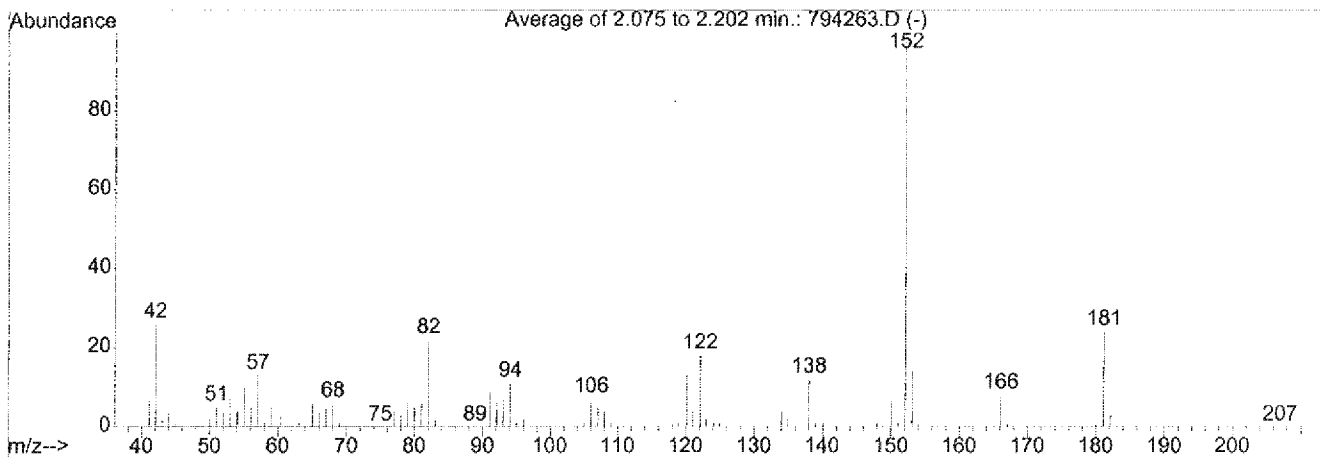
# Area Percent / Library Search Report

**Information from Data File:**

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 Operator : ASD  
 Date Acquired : 29 Jun 2011 20:29  
 Sample Name : XXXXXXXXXX  
 Submitted by : DXF  
 Vial Number : 63  
 AcquisitionMeth: DRUGS  
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
 C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
 C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	2.10	C:\DATABASE\PMW_TOX2.L		
		Cocaine-M/artifact -H2O	000000-00-0	96
		MDA-M (desmethylenyl-methyl-) ME @	000000-00-0	37
		Metipranolol-M/artifact AC	000000-00-0	32



# Area Percent / Library Search Report

**Information from Data File:**

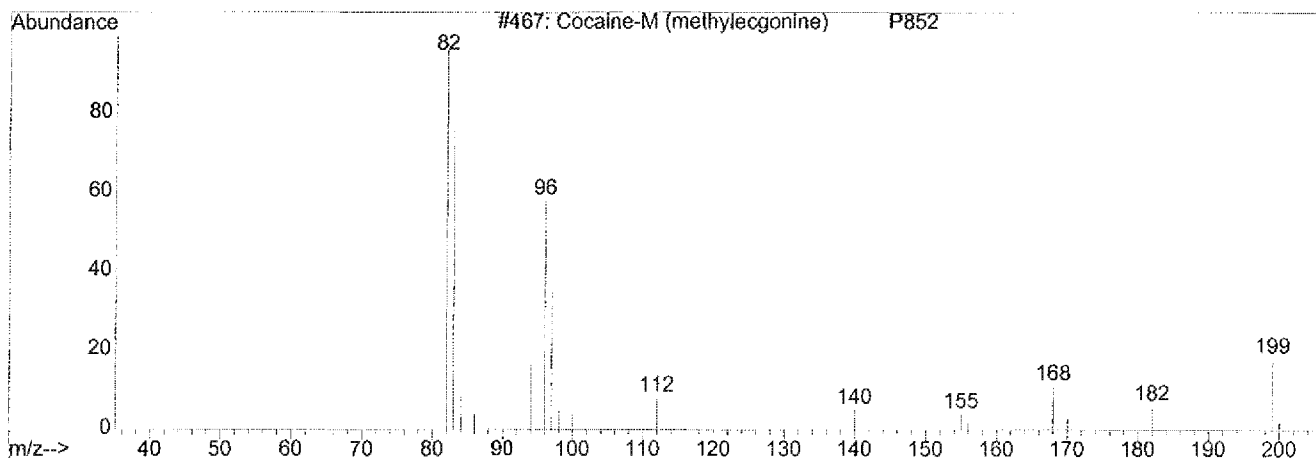
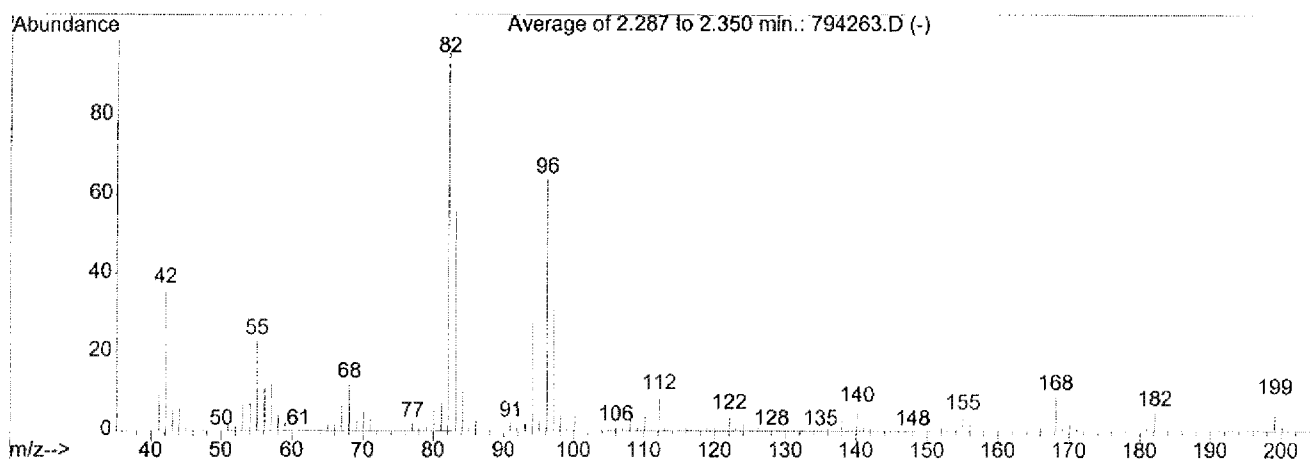
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File Name       : F:\SYSTEM7\06_29_11\794263.D
Operator        : ASD
Date Acquired   : 29 Jun 2011  20:29
Sample Name     : 
Submitted by    : DXF
Vial Number     : 63
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
2	2.31	C:\DATABASE\PMW_TOX2.L		
		Cocaine-M (methylecgonine)	007143-09-1	93
		Cocaine-M (methylecgonine) AC	000000-00-0	45
		Lobeline artifact	000000-00-0	9



# Area Percent / Library Search Report

**Information from Data File:**

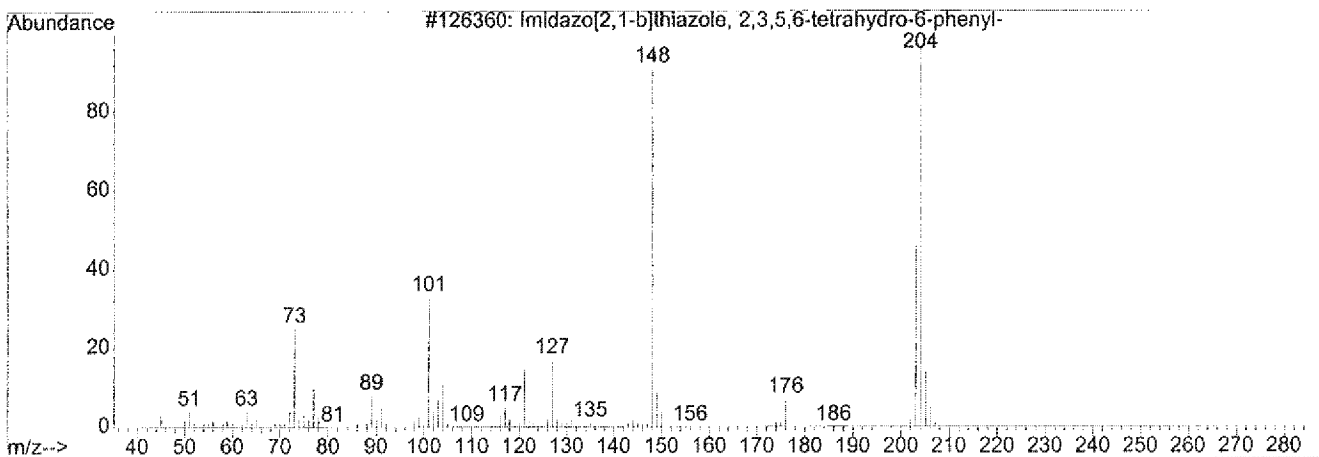
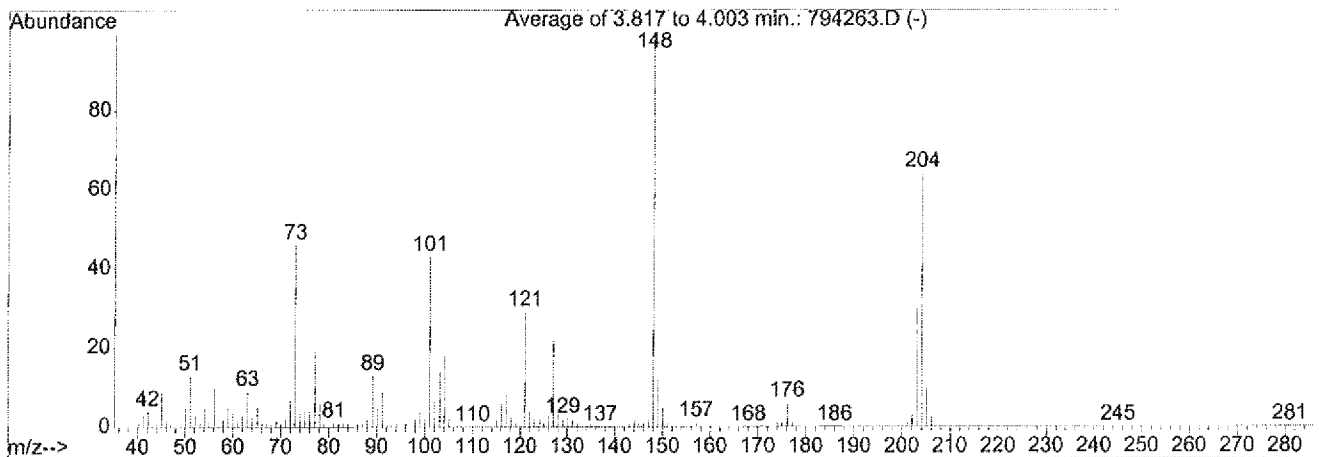
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File Name       : F:\SYSTEM7\06_29_11\794263.D
Operator        : ASD
Date Acquired   : 29 Jun 2011   20:29
Sample Name     : 
Submitted by    : DXF
Vial Number     : 63
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
3	3.84	C:\DATABASE\NIST98.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	97



# Area Percent / Library Search Report

**Information from Data File:**

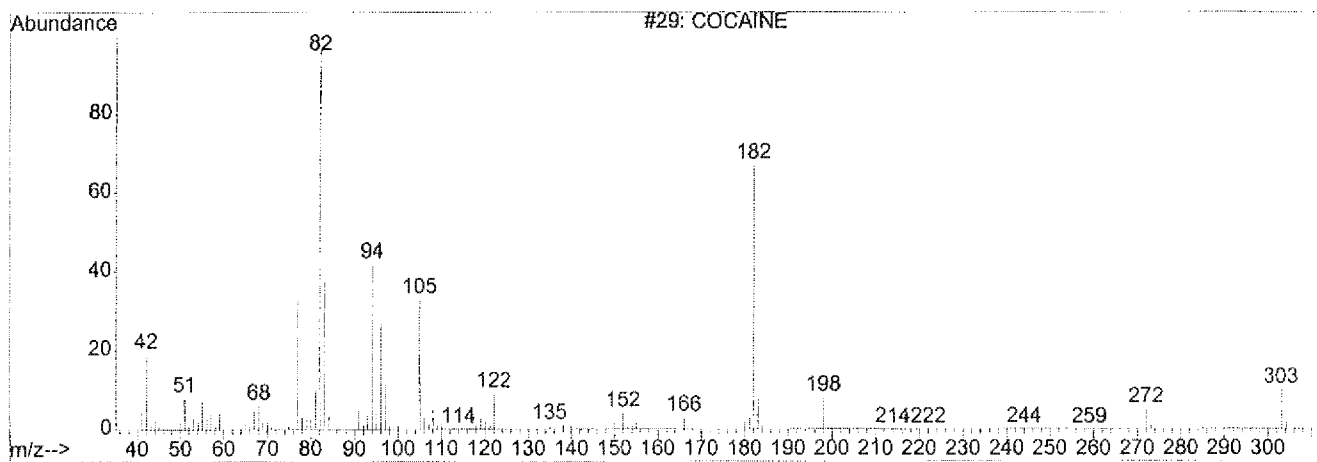
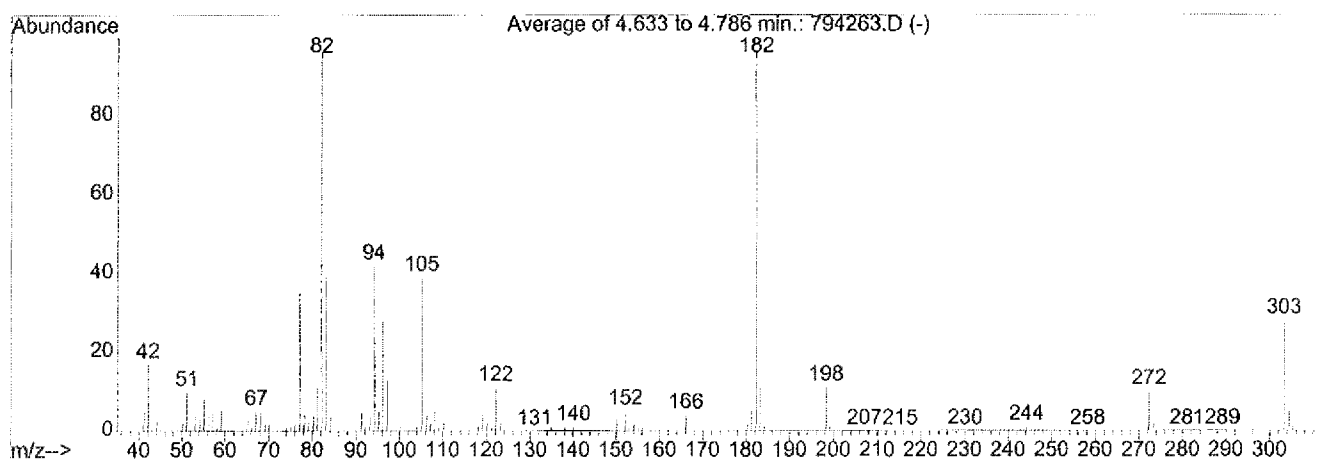
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File Name       : F:\SYSTEM7\06_29_11\794263.D
Operator        : ASD
Date Acquired   : 29 Jun 2011  20:29
Sample Name     : ██████████
Submitted by    : DXF
Vial Number     : 63
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
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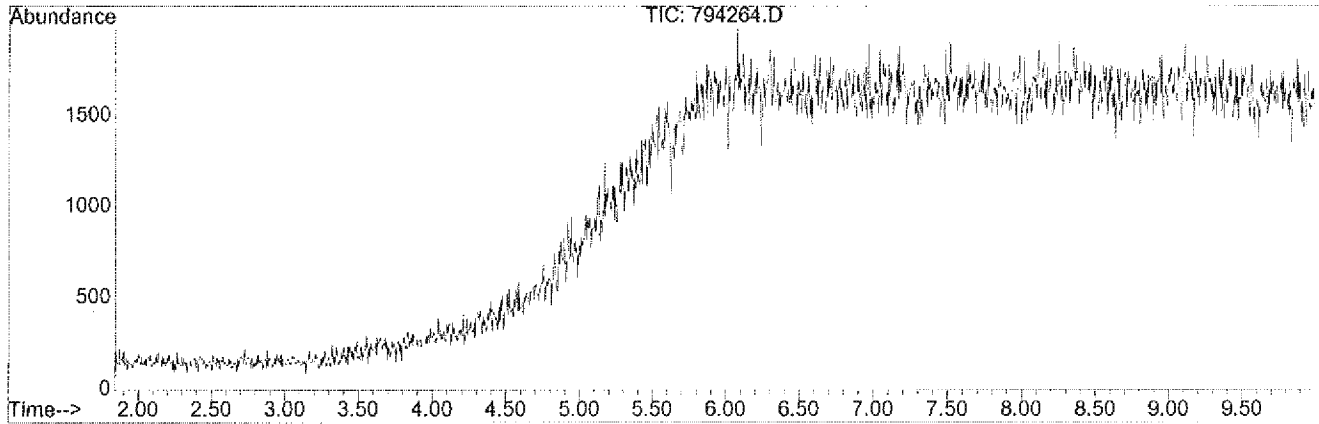
# Area Percent / Library Search Report

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## Information from Data File:

File Name : F:\SYSTEM7\06\_29\_11\794264.D  
Operator : ASD  
Date Acquired : 29 Jun 2011 20:42  
Sample Name : BLANK  
Submitted by : DXF  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

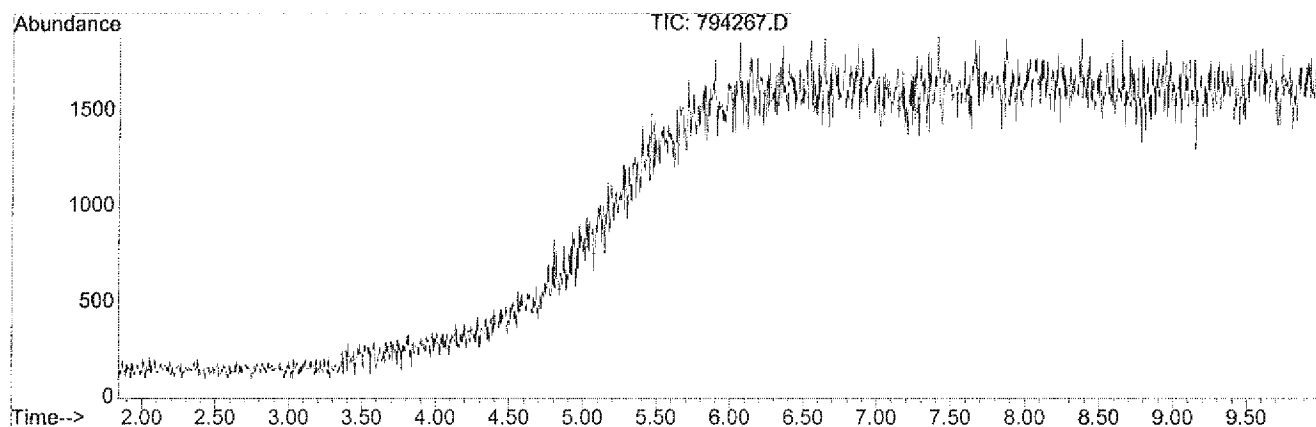
# Area Percent / Library Search Report

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Operator : ASD  
Date Acquired : 29 Jun 2011 21:20  
Sample Name : BLANK  
Submitted by :  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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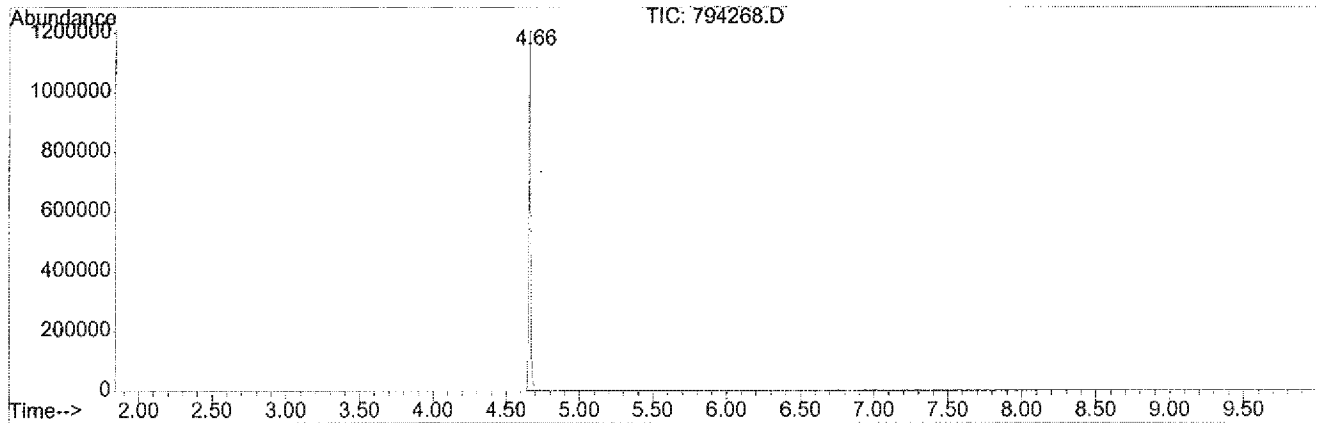
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\*\*\*NO INTEGRATED PEAKS\*\*\*

# Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\06\_29\_11\794268.D  
 Operator : ASD  
 Date Acquired : 29 Jun 2011 21:32  
 Sample Name : COCAINE STD  
 Submitted by :  
 Vial Number : 16  
 AcquisitionMeth: DRUGS  
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.659	1079123	100.00	100.00

# Area Percent / Library Search Report

**Information from Data File:**

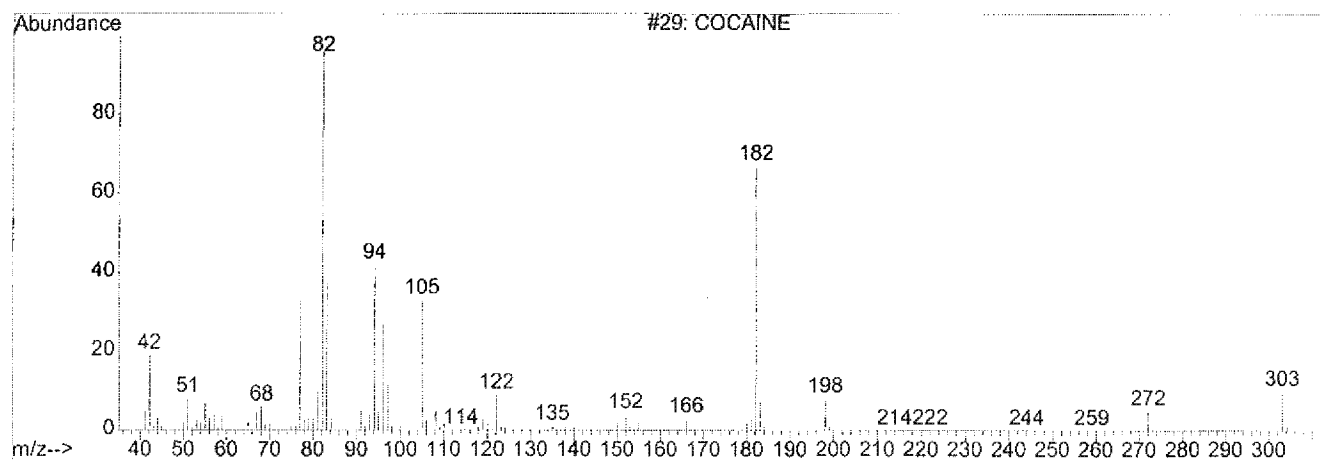
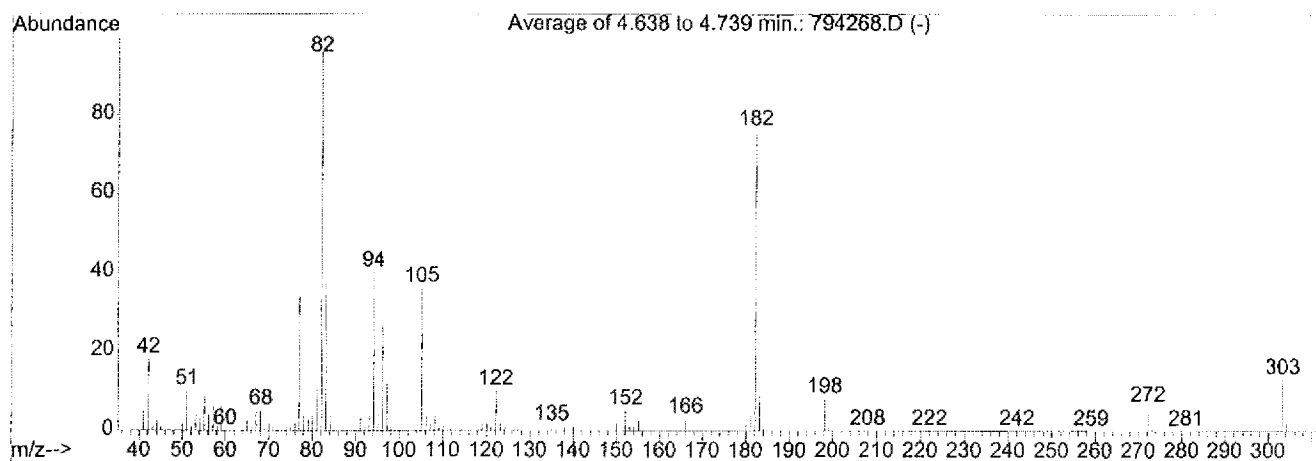
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File Name       : F:\SYSTEM7\06_29_11\794268.D
Operator        : ASD
Date Acquired   : 29 Jun 2011  21:32
Sample Name     : COCAINE STD
Submitted by    :
Vial Number     : 16
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
1	4.66	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



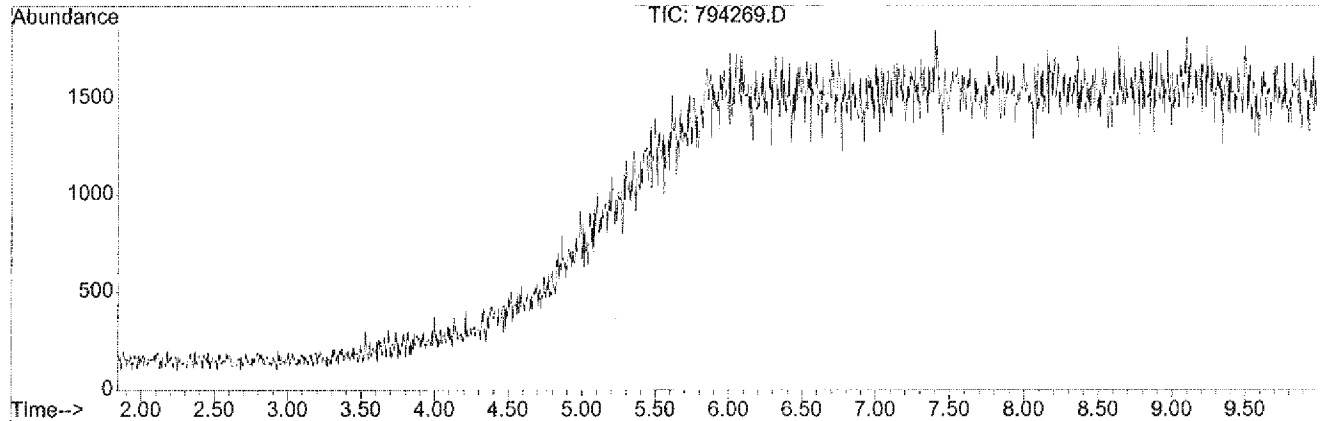
# Area Percent / Library Search Report

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## Information from Data File:

File Name : F:\SYSTEM7\06\_29\_11\794269.D  
Operator : ASD  
Date Acquired : 29 Jun 2011 21:45  
Sample Name : BLANK  
Submitted by : DXF  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*